Application Serial No. 10/501,842 Amendment dated June 20, 2007

Reply to Office Action dated December 20, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (currently amended): Frequency A frequency shifted feedback emission source, characterized by the fact that a means is used comprising means to increase emission frequency component beat intensity.

Claim 2 (currently amended): Frequency The frequency shifted feedback emission source according to claim 1, eharacterized by the fact that wherein the means to increase emission frequency component beat intensity is configured as a means for non-stochastic emission frequency component beat intensity increasing.

Claim 3 (currently amended): Frequency The frequency shifted feedback emission source according to claim 2, characterized by the fact that wherein the means to increase emission frequency component beat intensity includes an injection light source.

Claim 4 (currently amended): Frequency The frequency shifted feedback emission source according to claim 3, characterized by the fact that wherein the injection light source includes [[and]] an injection laser.

Claim 5 (currently amended): Frequency The frequency shifted feedback emission source according to claim 3, eharacterized by the fact that wherein the injection light source is configured to inject irradiation into the resonator of the frequency shifted feedback emission source, specifically for irradiation into the amplification medium.

Claim 6 (currently amended): Frequency The frequency shifted feedback emission source according to claim 3, characterized by the fact that wherein the injection light source is configured for emission of irradiation of an irradiation frequency close to the upper or lower amplification threshold (G-1).

Application Serial No. 10/501,842 Amendment dated June 20, 2007 Reply to Office Action dated December 20, 2006

Claim 7 (currently amended): Frequency The frequency shifted feedback emission source according to claim 3, characterized by the fact that wherein the injection light source for the irradiation of injection light is narrowband in reference to the amplification bandwidth of the frequency shifted feedback emission source, specifically a width below 5%, preferably below bandwidth below 5% of the bandwidth of the amplification of the frequency shifted feedback emission source.

Claim 8 (currently amended): Frequency The frequency shifted feedback emission source according to claim 3, characterized by the fact that wherein the injection light source is configured for irradiation of the appropriate intensity and/or phase of the optical carrier.

Claim 9 (currently amended): Frequency The frequency shifted feedback emission source according to claim 8, characterized by the fact that wherein the injection light source is configured for regular modulation of intensity and/or phase of the injection light.

Claim 10 (currently amended): Frequency The frequency shifted feedback emission source according to claim 9, characterized by the fact that wherein the injection light source is configured to perform a periodic modulation of intensity and/or phase that changes with time.

Claim 11 (currently amended): Frequency The frequency shifted feedback emission source according to claim 9, characterized by the fact that wherein the injection light source is configured so at least temporally one linear modulation frequency variation takes place.

Claim 12 (currently amended): Frequency The frequency shifted feedback emission source according to claim 8, characterized by the fact that wherein the injection light source is configured so that [[a]] modulation lies in the magnitude order and/or close to [[the]] distances determined using the emission source and [[the]] a given chirp rate from the frequency shifted feedback emission source is obtained.

Claim 13 (currently amended): Frequency The frequency shifted feedback emission source according to claim 1, characterized by the fact that claim 8, wherein the frequency shifted feedback emission light source is a laser.

Application Serial No. 10/501,842 Amendment dated June 20, 2007 Reply to Office Action dated December 20, 2006

Claim 14 (currently amended): Frequency The frequency shifted feedback emission source according to claim 1, characterized by the fact that an optic wherein an optical fiber is used internally in the resonator.

Claim 15 (currently amended): Distance A distance measurement configuration with an emission light source according to claim 1.

Claim 16 (currently amended): Distance The distance measurement configuration according to claim 15, characterized by the fact that including irradiation optics [[are]] used to broadly illuminate a surface to be investigated with light from the emission source and [[a]] means is used to obtain a beat spectrum containing height profile information.

Claim 17 (currently amended): Distance The distance measurement configuration according to claim 1, characterized by the fact that claim 15, including an optic is used to direct irradiation from the emission light source to a defined partial range of [[the]] an object.

Claim 18 (currently amended): Process A process for operating a frequency shifted feedback emission light source, characterized by the fact that wherein the beat intensity of the frequency components of the emitted irradiation are increased beyond what is achieved in a stationary condition through spontaneous emission.

Claim 19 (currently amended): Frequency The frequency shifted feedback emission source according to claim 4, characterized by the fact that wherein the injection light source is configured to inject irradiation into the resonator of the frequency shifted feedback emission source, specifically for irradiation into the amplification medium.

Claim 20 (currently amended): Frequency The frequency shifted feedback emission source according to claim 4, characterized by the fact that wherein the injection light source is configured for emission of irradiation of an irradiation frequency close to the upper or lower amplification threshold (G-1).

Application Serial No. 10/501,842 Amendment dated June 20, 2007 Reply to Office Action dated December 20, 2006

Claim 21 (currently amended): The frequency shifted feedback emission source according to claim 3, wherein the injection light source for the irradiation of injection light is narrowband in reference to the amplification bandwidth of the frequency shifted feedback emission source, specifically a bandwidth below 1% of the bandwidth of the amplification of the frequency shifted feedback emission source.